

City of Morgan Hill

General Plan Circulation Element Amendment: Presentation of Draft EIR Study Findings

September 1, 2009

Meeting Agenda

- Introductions
- Presentation – 30 - 40 min.
- Receive Public & PC Comments
- Next Steps



Staff and Consultants

- City Staff
 - Kathy Molloy Previsich, Community Development Director
 - Scott Creer, Public Works Representative
- Fehr & Peers (Transportation)
 - Sohrab Rashid, T.E.
 - Daniel Rubins, P.E.
- David J. Powers & Associates (Environmental)
 - Michelle Yesney
 - Nora Monette
 - Demetri Loukas
 - Will Burns

Community Meetings for Circulation Element Amendment

- Saturday, August 29, 2009 9:30 - 11:30 AM
- Monday, August 31, 2009 7:00 - 9:00 PM
- Thursday, September 3, 2009 7:00 - 9:00 PM



Presentation Outline

- What is a General Plan Circulation Element
- Previous Transportation Planning
- Study Objectives
- Study Process
- Model Development and Traffic Analysis
- Circulation Element Amendment
 - Proposed Network Modifications
 - Proposed Policy Revisions
 - Environmental Review
- Focus Areas
- Next Steps



What is a General Plan Circulation Element?

- General Plan
 - Articulates the City's vision
- Circulation Element
 - Proposed transportation system
 - Goals, policies and actions
- Updated when conditions change
 - Approximately every 10 years



Morgan Hill
General Plan

July 2001



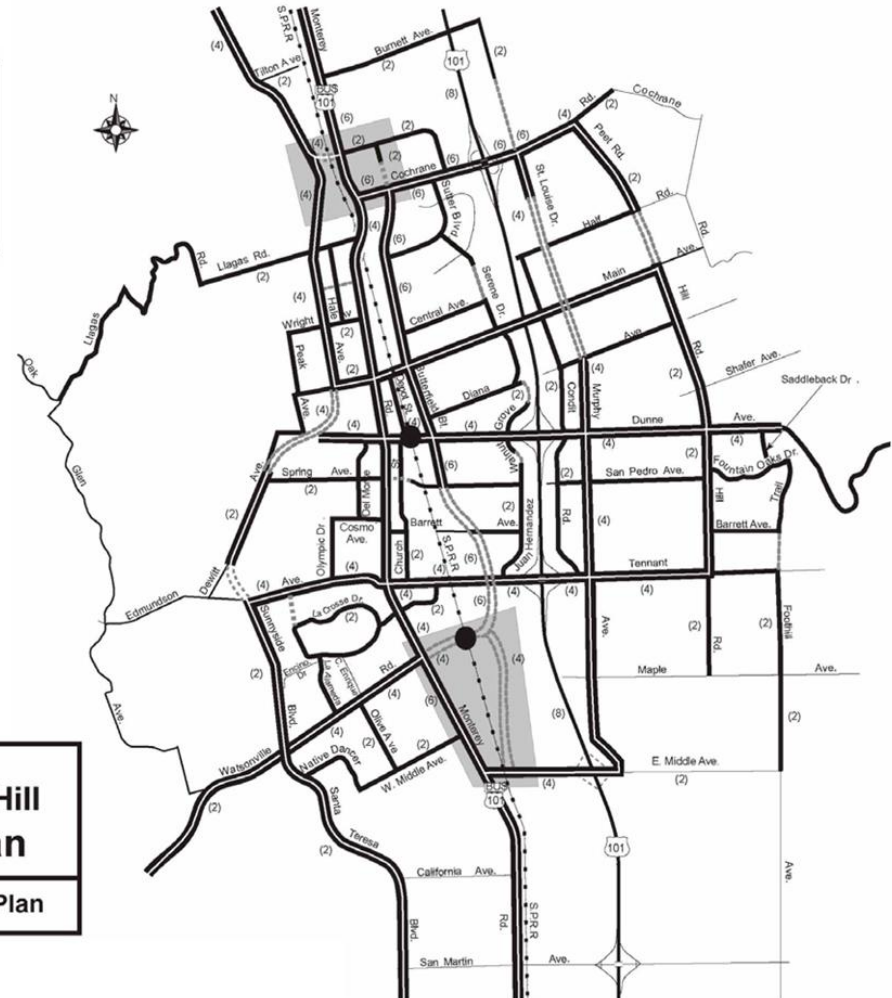
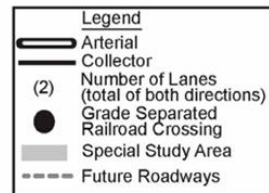
Updated August 2005
Resolution 5937

Previous Transportation Planning

- Previous Travel Demand Model
- 2001 General Plan Circulation Element
- Other regional planning efforts
 - South County Circulation Study
 - Coyote Valley
- Local transportation impact analyses (TIAs)
- Local corridor and interchange studies
 - Murphy Avenue Corridor
 - US 101 / Tennant Avenue interchange



Previous Transportation Planning



**City of
Morgan Hill**

General Plan

Map 4. Circulation Plan

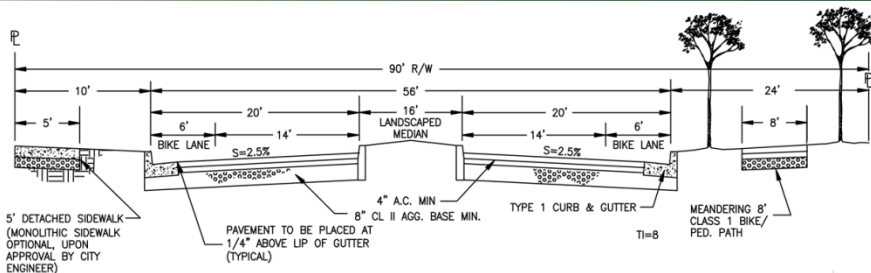
Previous Transportation Planning

- Current Level of Service Standard (Policy 3d)
 - LOS E at freeway interchange intersections
 - LOS D used for roadway segments
 - LOS D+ (< 39 seconds of delay) except at three other intersections (LOS D < 51 seconds of delay)
 - Madrone Parkway and Monterey Road
 - Tennant Avenue and Butterfield Boulevard
 - Watsonville Road and Monterey Road



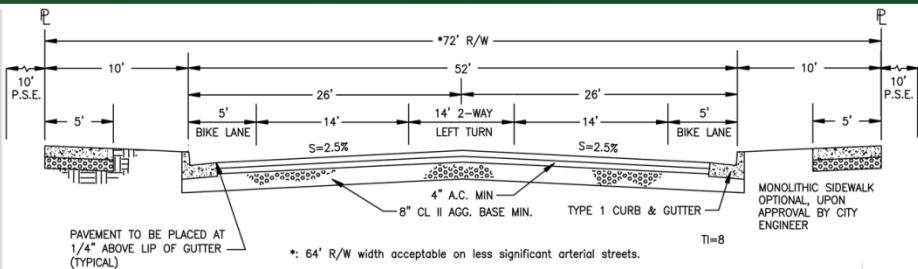
Study Objectives

- Update Circulation Element
 - Transportation system
 - Goals, policies, and actions
 - Multi-modal travel/Smart growth
 - Reduced vehicle use



MULTI-MODAL OPTION #1
2 LANE DIVIDED ARTERIAL
WITH MEDIAN AND LINEAR PARK

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MULTI-MODAL OPTION #2
2 LANE ARTERIAL WITH
2-WAY LEFT TURN LANE

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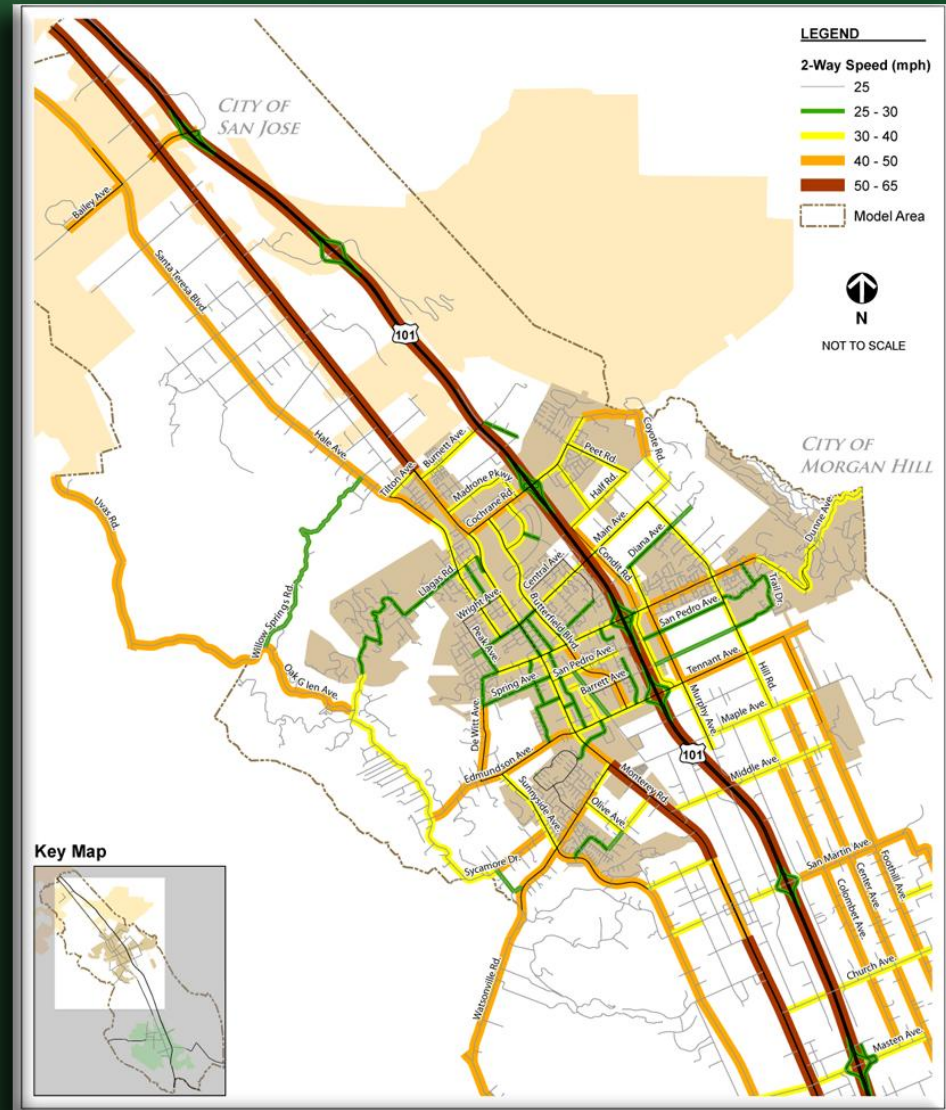
Study Process

- Review
 - Level of service policy
 - Planned roadway network
 - Impact analysis guidelines
- Develop Validated Travel Demand Model
- Propose Circulation Element Changes
 - Roadway Network
 - Goals, policies and actions
 - Alternatives
 - Environmental Evaluation
- Next Steps

- Old travel demand model
 - Multiple counties
 - Different time periods and purpose
- New travel demand model
 - Focused and stand-alone
 - Year 2007, 2015 and 2030
 - Coyote Valley, Morgan Hill and Gilroy
- Calibrated using VTA travel model
 - Regional and inter-regional trips
 - External station weights

- Streets defined by type
 - Freeway
 - Arterial
 - Collector
- Intended to show relative difference in capacity
- Includes number of lanes, and speed

Base Year (2007) Roadway Free-Flow Speed



New Travel Demand Model

- Traffic analysis zones (TAZs) used to connect land use to transportation network
- Land use aggregated from parcel level
- Generally nested within VTA zones
- Accounts for political boundaries, loading characteristics to the roadway



New Travel Demand Model

- Static validation to traffic counts
 - 6 screenlines
 - 66 daily segments
 - 100+ peak hour segments
- Dynamic validation to test sensitivity
 - Add or delete lanes, links, or land use

Daily and Peak Hour Screenline Locations

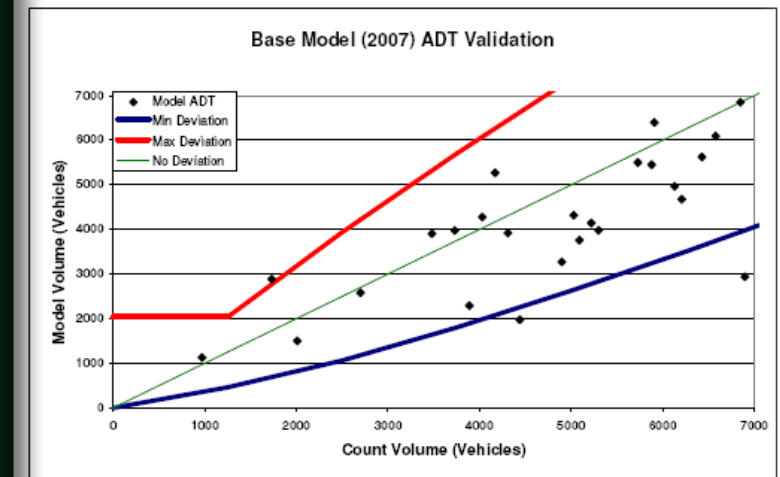
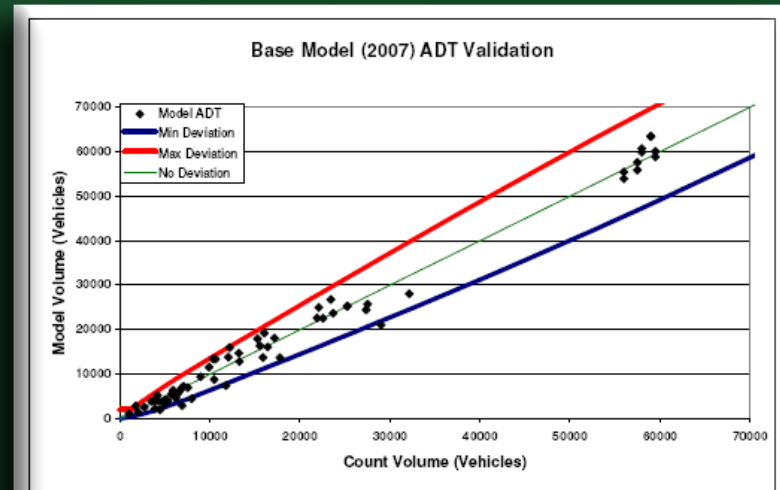
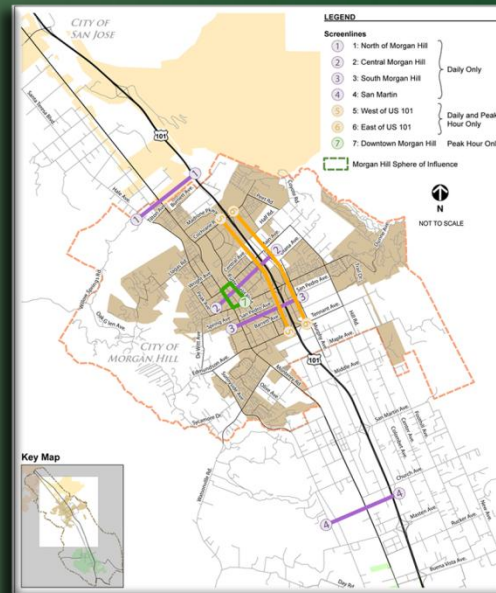
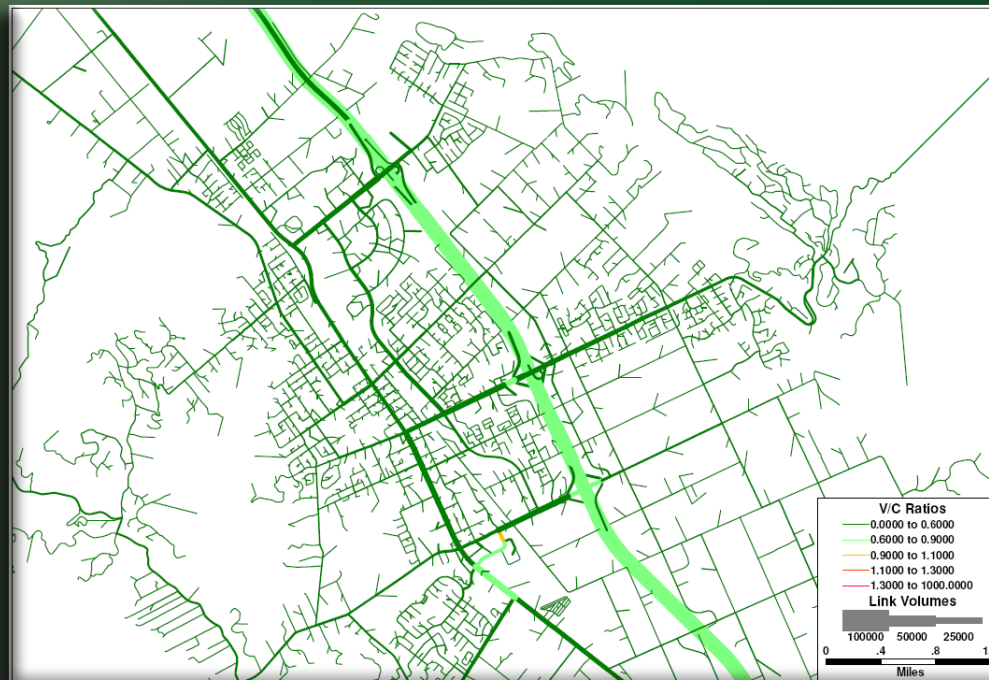


Figure 12 Daily Model Validation Scatter Plots

Traffic Analysis

- Study scenarios
 - 2001 General Plan Circulation Element
 - Recommended roadway network amendments
 - City-proposed network amendments
 - Other land use General Plan amendments

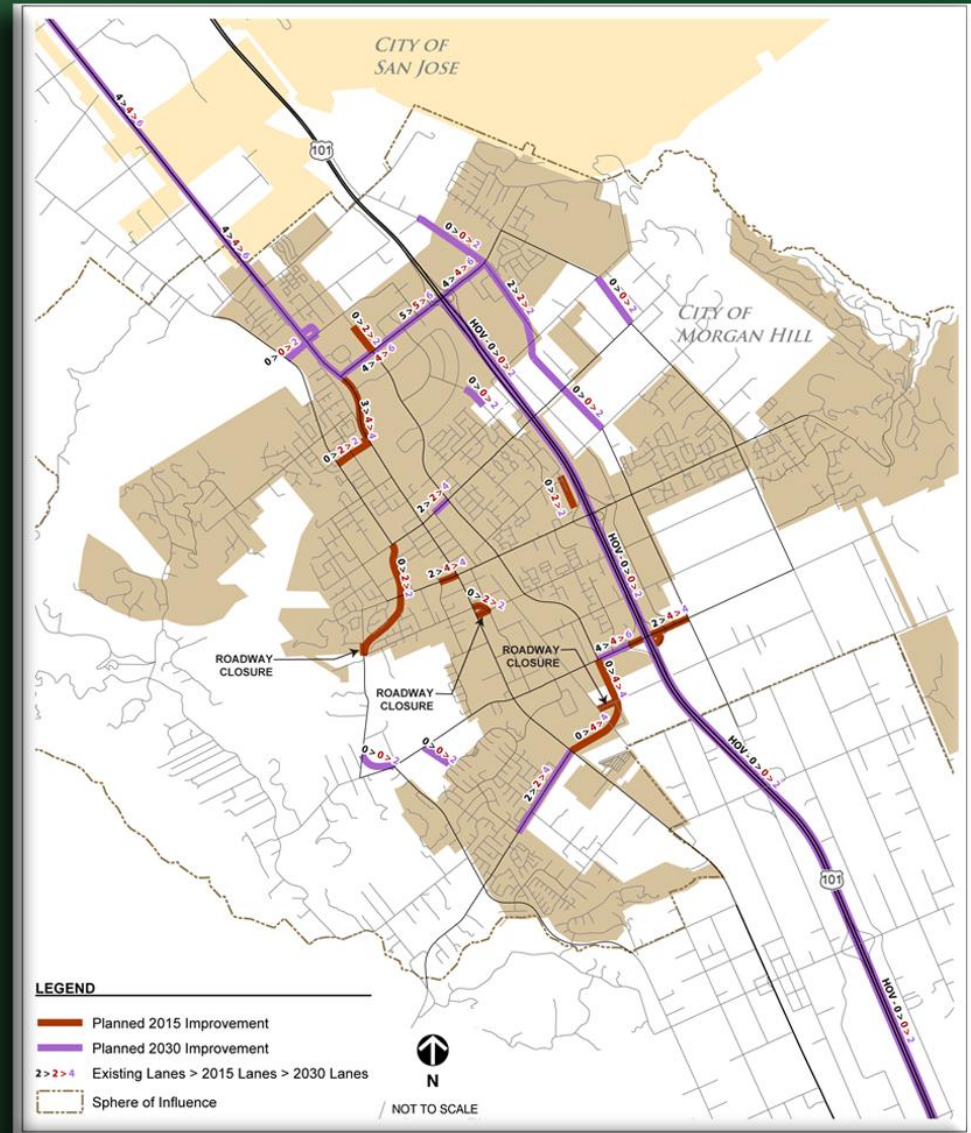


Proposed Network Changes

- Planning level LOS thresholds for each facility type
- Deficiencies and under-utilized segments noted
- Reasons for differences from 2001
 - Updated ABAG regional land use and social demographics – post dot-com boom/bust
 - Reduced Coyote Valley land use
 - More accurately loaded network
 - More detail with smaller TAZs
 - Different land use categories, trip rates and assignment parameters
 - Roadway counts with US 101 widened
 - New City model is better calibrated and validated

Proposed Network Changes

Recommended Roadway Improvements and Required Number of Lanes

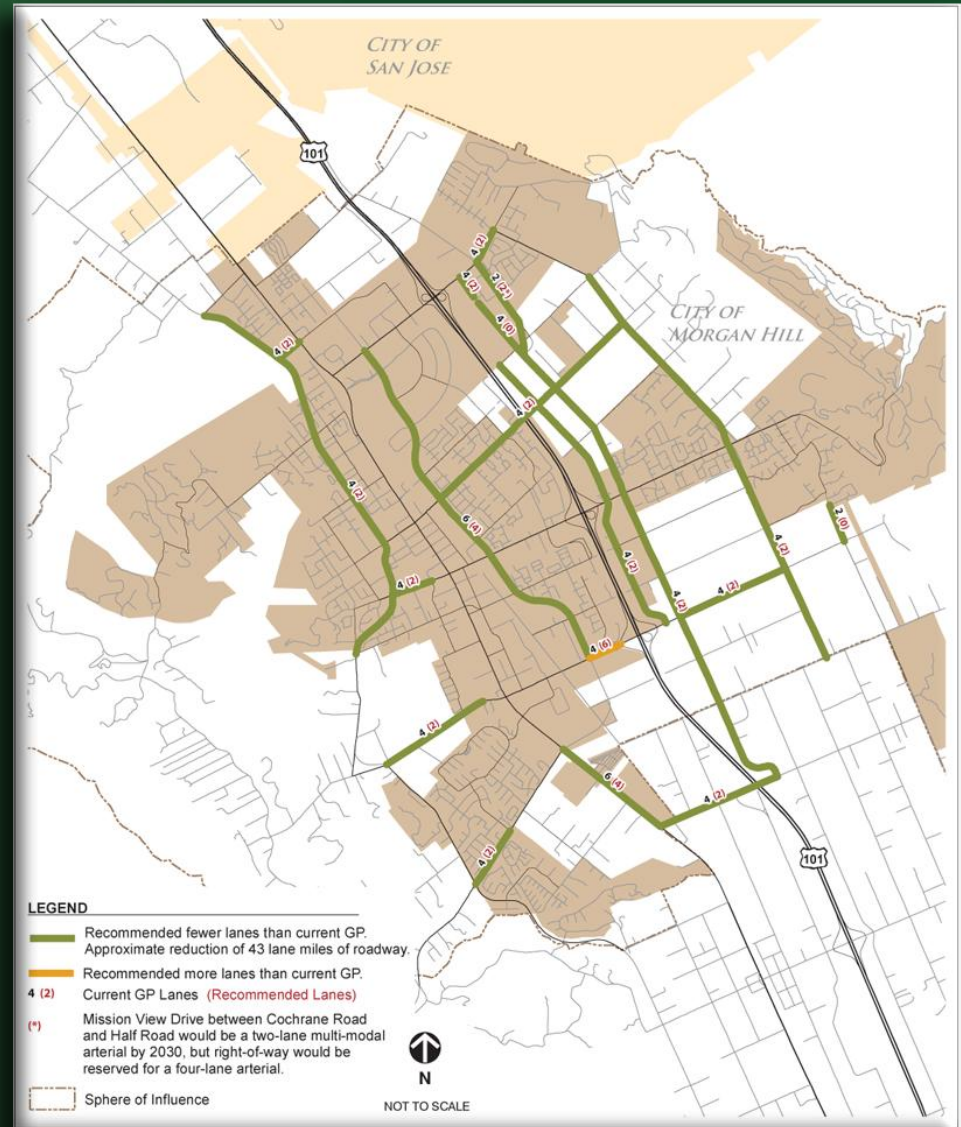


LIST OF MODEL-RECOMMENDED NETWORK CHANGES FROM CURRENT GENERAL PLAN

- | | |
|----------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------|
| 1. Hale Ave/Santa Teresa Blvd between Tilton Ave & Spring Ave | 4 to 2 lanes |
| 2. Monterey Rd between Watsonville Rd & Middle Ave | 6 to 4 lanes |
| 3. Butterfield Blvd between Cochrane Rd & Monterey Rd | 6 to 4 lanes |
| 4. Condit Rd between Half Rd & Tennant Ave | 4 to 2 lanes |
| 5. Murphy Ave to align with St. Louise Dr btwn Cochrane & Half:
<i>St. Louise does not connect with Half Road</i> | 4 to None |
| 6. Murphy Ave to align with Mission View btwn Cochrane & Half:
<i>(Murphy Ave realigned with Mission View Dr)</i> | 2 stays 2 (but north part may need additional ROW for add'l turn lane) |
| 7. Murphy Ave between Half Rd & Middle Ave | 4 to 2 lanes |
| 8. Hill Rd between Half Rd & Maple Ave | 4 to 2 lanes |
| 9. Extension of Foothill Ave between Barrett Ave & Tennant Ave | 2 to None |
| 10. Madrone Pkwy between Hale Ave & Monterey Rd | 4 to 2 lanes <i>grade-separated by 2030</i> |
| 11. Cochrane Rd between Mission View Blvd & Peet Rd | 4 to 2 lanes |
| 12. Main Ave between Butterfield Blvd & Hill Rd | 4 to 2 lanes |
| 13. Dunne Ave between Hale Ave/Santa Teresa Blvd & Del Monte | 4 to 2 lanes |
| 14. Edmundson Ave between Sunnyside Ave & Piazza Wy | 4 to 2 lanes |
| 15. Tennant Ave between Butterfield Blvd & US 101 SB Ramps | 4 to 6 lanes <i>(increase)</i> |
| 16. Tennant Ave between Murphy Ave & Hill Rd | 4 to 2 lanes |
| 17. Watsonville Rd between Santa Teresa Blvd & La Alameda | 4 to 2 lanes |
| 18. Middle Rd between Monterey Rd & Murphy Ave | 4 to 2 lanes (outside of City) |

Proposed Network Changes

- Key changes
 - Hale Avenue/Santa Teresa Boulevard
 - Monterey Road
 - Butterfield Boulevard
 - Murphy Avenue
 - Tennant Avenue west of US 101
 - Other connections east of US 101
- Approximate reduction of 43 lane miles of roadway



Proposed LOS Policy Changes

- Reasons for considering changes
 - Desired vehicle LOS must be balanced against other community values such as resource protection, social equity, and economic development
 - Align with other GP goals and policies
 - Bike, pedestrian and transit
 - Land use
 - Sustainability
 - Balance needs of all transportation system users
 - Reduce the amount of underutilized road space
 - Acknowledge physical constraints to avoid regularly overriding impacts



Proposed LOS Policy Changes

- Citywide LOS D policy for intersections and roadways
 - No minimum standard for downtown core
[*may establish a defined “capped F”*]
 - LOS E for select downtown periphery, freeway access zones, and regional intersections
- Benefits
 - Fewer improvements than existing policy
 - Supports downtown design
 - Incentive for mode change
 - Reduced coverage and Green House Gases
 - Reduced cost for new development



Environmental Review Draft EIR Study Findings

- **Project Impacts 2030 under Current General Plan:**
 - 6 Freeway segments (3 in each direction)
 - Main Avenue and Monterey Road
 - Benefits to pedestrian, bicycle and transit users
- **Cumulative Effects 2030 with All GPAs:**
 - Monterey Road between Main Avenue and Dunne Avenue (due to narrowing)
 - 6 Freeway segments (3 in each direction)
 - 4 Intersections
 - Main Avenue and Monterey Road
 - Main Avenue and Butterfield Boulevard
 - Dunne Avenue and Del Monte Street
 - Dunne Avenue and Monterey Road
 - Benefits to pedestrian, bicycle and transit users

Environmental Review

•CURRENT 2030 GENERAL PLAN WITH MODEL-RECOMMENDED NETWORK

- Existing (2007) Intersections Below Current LOD D+ Standard
 - Main/Monterey at D; Proposed LOS would allow F
 - Dunne/Butterfield at D in PM; Proposed LOS would allow E
- Project Impacts at 2030:
 - Tennant Avenue between Butterfield & US 101 Ramps needs to be widened to 6 lanes
 - Main/Monterey at E+ (AM) & D (PM) – no feasible mitigation
 - Monterey/Central at F (AM) & F (PM)
 - Monterey/Fourth at F (AM) & F (PM)
 - Monterey/Fifth at F (AM) & F (PM) but not significant impact because signal warrants not met City to monitor.
 - Under Proposed LOS, all Monterey intersections allowed at F

Environmental Review

•2030 CUMULATIVE WITH ALL CIRC & LAND USE GPA, INCLUDING MONTEREY ROAD 2-LANE NARROWING

- Cumulative Effects with Downtown Specific Plan and other GP Land Use Amendments, and ALL possible circulation network amendments
 - Segment of Monterey between Main & Dunne would be F
 - Main/Monterey at F in AM & PM – no feasible mitigation
 - Main/Butterfield at D in AM & PM – install 2nd left turn lane north
 - Dunne/Monterey at D in PM – modify intersection; consider keeping Monterey 4 lanes for block from Dunne to Fifth
 - Dunne/Butterfield at D in PM – not considered a signif impact
- Main/Monterey at F (AM) & F (PM) – no feasible mitigation
- Monterey/Central at F (AM) & F (PM) – signal warrant not met
- Monterey/Fourth at F (AM) & F (PM) – signal warrant not met
- Monterey/Fifth at F (AM) & F (PM) – signal warrant not met
- Dunne/Del Monte at E (AM) & F (PM) – install traffic signal

US 101 FREEWAY OPERATION & IMPACTS

- VTA plans to add HOV lane through Morgan Hill by 2030 (8 lanes assumed to exist)
- Existing LOS is E for US 101 through Morgan Hill, but north of Cochrane to Coyote Ck Rd it is C northbound and D southbound
- Current 2030 General Plan: All Southbound segments and Northbound Cochrane to Coyote Ck operate at F, other 3 Northbound segments at E
- Current 2030 General Plan WITH Model-Recommended Circ.: Same LOS levels, but freeway volumes northbound btwn Dunne & Cochrane increase by 2.5% northbound and by 1.3% southbound; volumes btwn Dunne & Tennant decrease by 0.9% northbound and 1.0% southbound
- Cumulative GPAs 2030 with additional circulation changes and land use amendments, including DTSpecific Plan: Same LOS levels: significant impacts on 1 segment northbound (btwn Cochrane & Coyote Ck), and all 4 southbound segments (all F)
- Mitigation to widen to 5 lanes or add auxiliary lanes considered not feasible

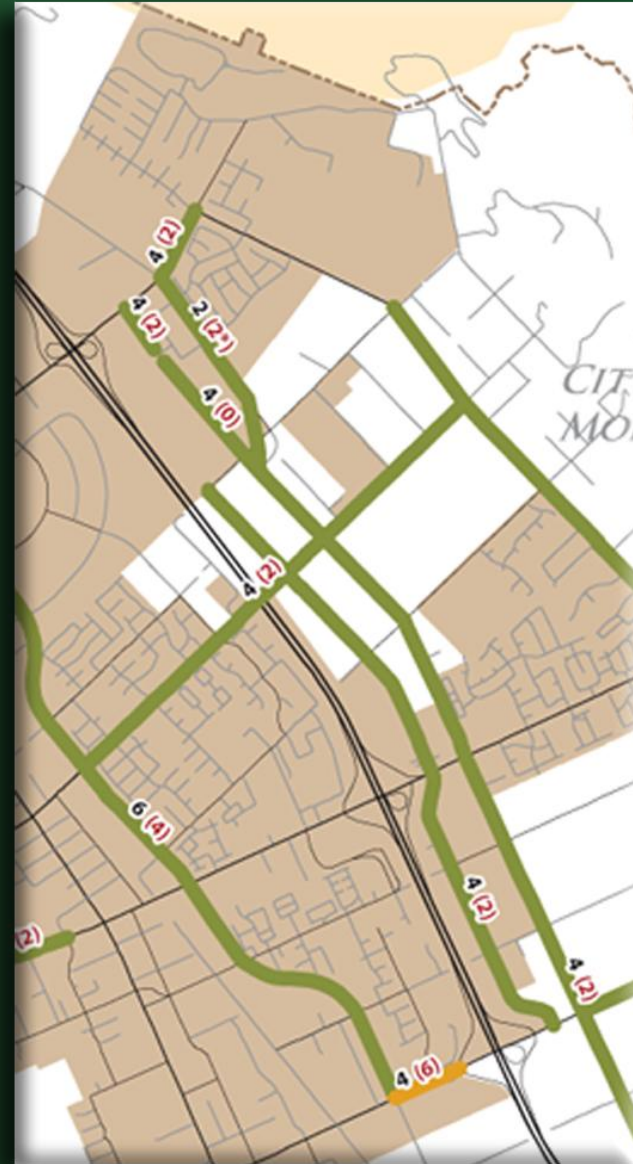
Focus Areas

- Murphy Avenue Corridor
- Walnut Grove Drive Extension Realignment
- Hale Avenue / Santa Teresa Boulevard Extension
- Monterey Road in Downtown

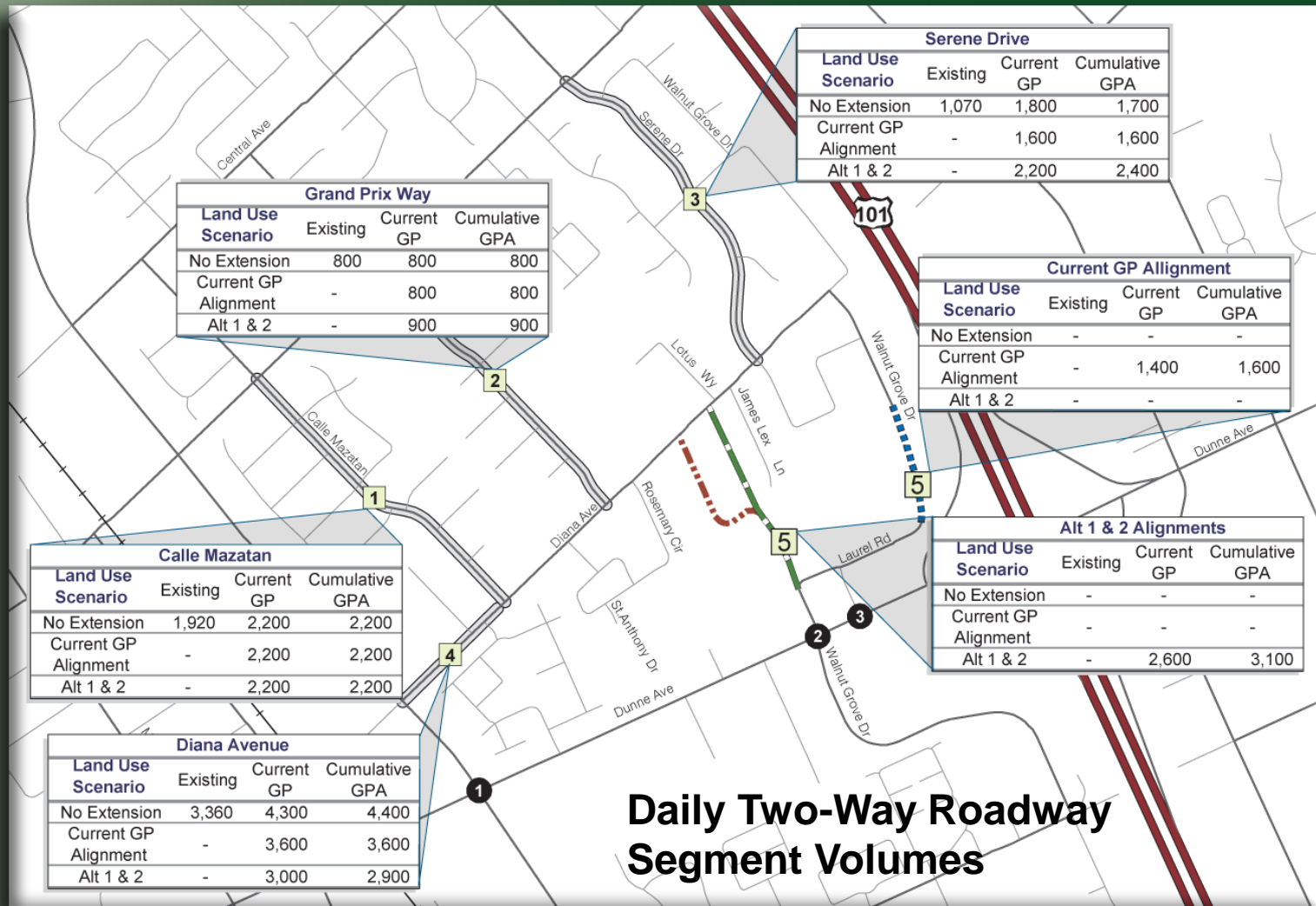
Murphy Avenue Corridor



Murphy Avenue Corridor



Walnut Grove Drive Extension



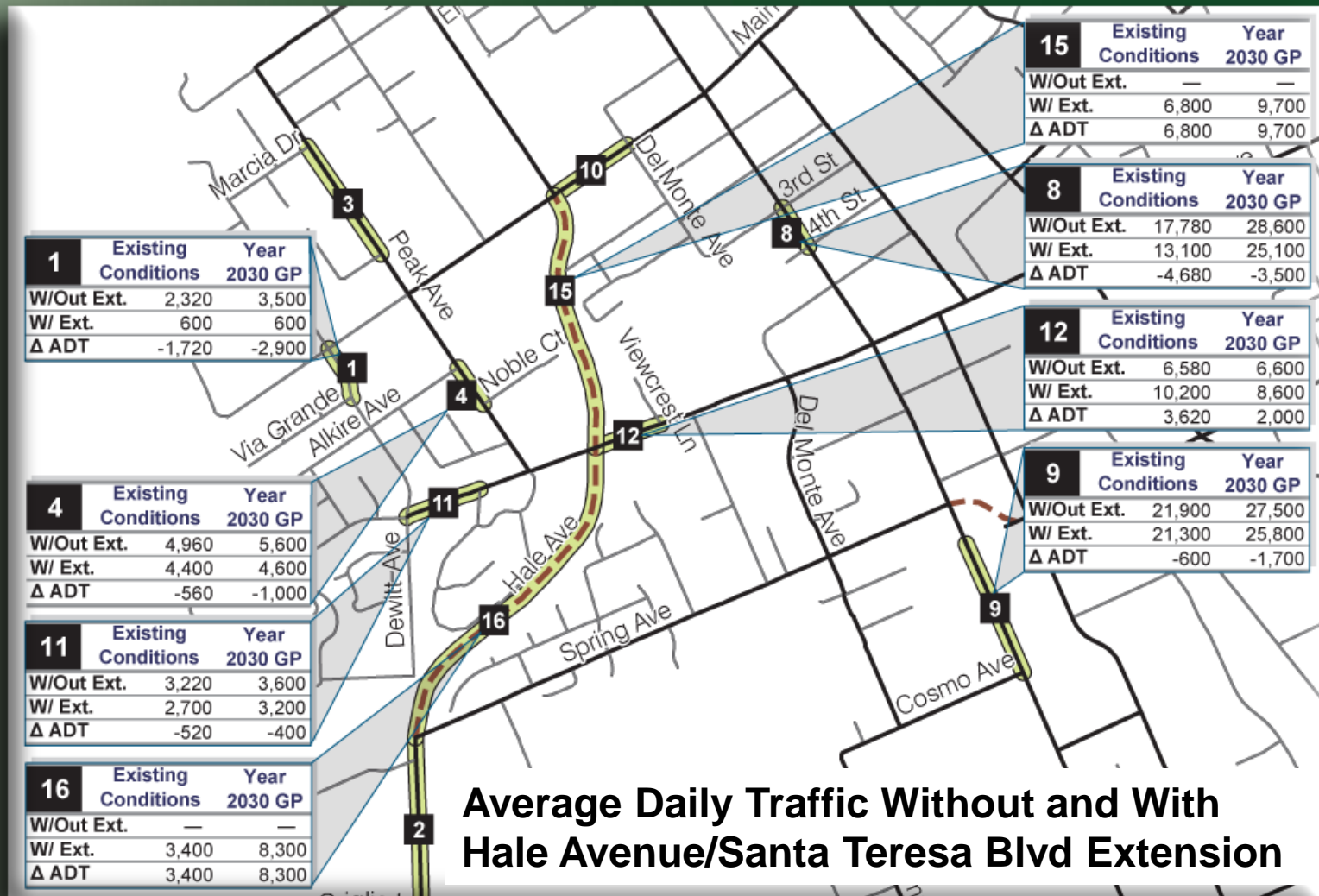
Study of Walnut Grove Extension

- Summary of Walnut Grove
 - City Council directed study of 4 Options:
 - 1) Existing General Plan Alignment (easternmost)
 - 2) Preferred Alignment (dog-leg, westernmost)
 - 3) Alternate Alignment (straight north)
 - 4) No Extension

ALL Options Provide for Segments LOS A in 2030 (but B in segment of Diana between Butterfield and Calle Mazatan) & D+ or better at intersections studied, under BOTH Current General Plan and Cumulative GPA 2030 Scenarios – therefore is not a CITYWIDE issue; is a local connectivity and emergency vehicle access issue

Process for City Council decision to be determined

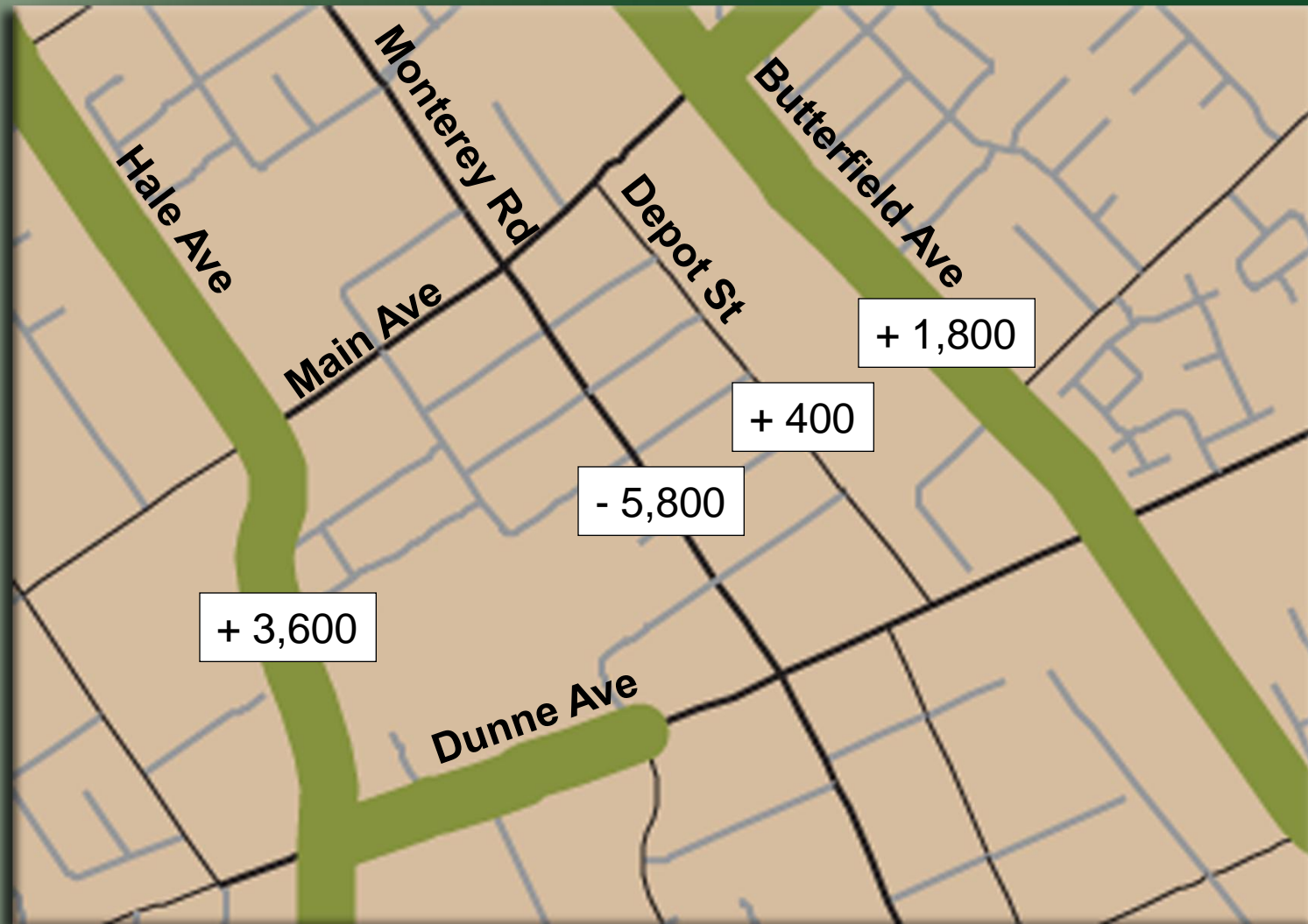
Hale Avenue / Santa Teresa Boulevard Extension



Santa Teresa/Hale Corridor

- Summary of Hale/Santa Teresa
 - Under Existing Conditions, if the new segments existed they would operate at LOS C
 - Multi-Modal 2-Lane Arterial Configuration Proposed
 - Under Current General Plan 2030 Conditions, the new segments would operate at LOS C, increased volumes primarily in the segment north of Dunne

Monterey Road Narrowing Downtown



Study of Effects of Narrowing Monterey to 2 Lanes

- Summary of Monterey Road Narrowing Impacts
 - Same as discussed under Cumulative GPA, and additionally:
 - Signalize Depot/Main intersection
 - Consider leaving Monterey 4 lanes between Dunne and Fifth to avoid Monterey/Dunne impact
 - Main/Hale intersection E in AM, but does not meet signal warrants – City to monitor
 - Benefits to pedestrian, bicycle and transit users
 - City has applied for streetscape planning grant to study street beautification/reconstruction project under both 4-lane and 2-lane configurations (no need to make any narrowing decision in the near-term)

Other Impact Areas Identified by Draft EIR

- Other Project and Cumulative Impacts
 - **NOISE** increases adjacent to road extensions along east side of Murphy/Mission View Extension, and within 100 feet of centerline of Walnut Grove Extension: Program Mitigation is available
 - **AIR QUALITY** – slight increase over Clean Air Plan (somewhat more development projected): Program Mitigation is available
 - **AIR QUALITY** related to Construction: Mitigation
 - **AGRICULTURAL** related to Murphy/Mission View Extension: Program Mitigation Available

Next Steps

- Public comments on Draft Circulation EIR due Sept 17th
- Preparation of Final EIR Responses to Comments
- Public Hearings by Planning Commission and City Council tentatively scheduled for October 2009
- Formal update of General Plan Circulation Element

